

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

225. (New) The method of claim 224 wherein the neutralized cell lysate is not subjected to denaturing conditions.

226. (New) The method of claim 224 wherein the neutralized cell lysate is subjected to heat denaturing conditions.

227. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome,

neutralizing the cell lysate, wherein the cell lysate is not purified, and incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

228. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome,

neutralizing the cell lysate, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, and incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

229. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome,

neutralizing the cell lysate to form a neutralized cell lysate, and  
incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

230. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome,

neutralizing the cell lysate to form a neutralized cell lysate, and  
incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is subjected to heat denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

231. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome,

neutralizing the cell lysate to form a neutralized cell lysate, wherein nucleic acids in the neutralized cell lysate are not separated from other material in the cell lysate, and

incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

232. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, neutralizing the cell lysate to form a neutralized cell lysate, and bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, wherein the neutralized cell lysate comprises a whole genome, and incubating the neutralized cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

233. (New) The method of claim 232 wherein the neutralized cell lysate is not subjected to denaturing conditions.

234. (New) The method of claim 232 wherein the neutralized cell lysate is subjected to heat denaturing conditions.

235. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, neutralizing the cell lysate, bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, wherein the cell lysate is not purified, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

236. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, neutralizing the cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, and incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

237. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, neutralizing the cell lysate to form a neutralized cell lysate, and bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, wherein the neutralized cell lysate comprises a whole genome, and incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

238. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, neutralizing the cell lysate to form a neutralized cell lysate, and bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, wherein the neutralized cell lysate comprises a whole genome, and incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is subjected to heat denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

239. (New) A method of amplifying a whole genome, the method comprising,  
lysing cells to form a cell lysate,  
neutralizing the cell lysate to form a neutralized cell lysate, and  
bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, wherein the neutralized cell lysate comprises a whole genome, wherein nucleic acids in the neutralized cell lysate are not separated from other material in the neutralized cell lysate, and  
incubating the neutralized cell lysate under conditions that promote replication of the genome, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

240. (New) A method of amplifying a target nucleic acid sequence, the method comprising,  
lysing cells to form a cell lysate,  
neutralizing the cell lysate to form a neutralized cell lysate, and  
incubating the neutralized cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence,  
wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

241. (New) The method of claim 240 wherein the neutralized cell lysate is not subjected to denaturing conditions.

242. (New) The method of claim 240 wherein the neutralized cell lysate is subjected to heat denaturing conditions.

243. (New) A method of amplifying a target nucleic acid sequence, the method comprising,  
lysing cells to form a cell lysate,  
neutralizing the cell lysate, and  
incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the cell lysate is not purified,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

244. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
neutralizing the cell lysate, and  
incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

245. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
neutralizing the cell lysate to form a neutralized cell lysate, and  
incubating the neutralized cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

246. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate to form a neutralized cell lysate, and

incubating the neutralized cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the neutralized cell lysate is subjected to denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

247. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate to form a neutralized cell lysate, and

incubating the neutralized cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein nucleic acids in the neutralized cell lysate are not separated from other material in the neutralized cell lysate, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

248. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate to form a neutralized cell lysate, and

bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, and

incubating the neutralized cell lysate under conditions that promote replication of a target sequence,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

249. (New) The method of claim 248 wherein the neutralized cell lysate is not subjected to denaturing conditions.

250. (New) The method of claim 248 wherein the neutralized cell lysate is subjected to heat denaturing conditions.

251. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, and incubating the cell lysate under conditions that promote replication of a target sequence, wherein the cell lysate is not purified,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

252. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, and incubating the cell lysate under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate,



wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

253. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
neutralizing the cell lysate to form a neutralized cell lysate, and  
bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, and

incubating the neutralized cell lysate under conditions that promote replication of a target sequence, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

254. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
neutralizing the cell lysate to form a neutralized cell lysate, and  
bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, and

incubating the neutralized cell lysate under conditions that promote replication of a target sequence, wherein the neutralized cell lysate is subjected to heat denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

255. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

neutralizing the cell lysate to form a neutralized cell lysate, and

bringing into contact a set of primers, DNA polymerase, and the neutralized cell lysate, and

incubating the neutralized cell lysate under conditions that promote replication of a target sequence, wherein nucleic acids in the neutralized cell lysate are not separated from other material in the neutralized cell lysate, wherein the neutralized cell lysate is not subjected to denaturing conditions,

wherein replication of the neutralized cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

256. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

257. (New) The method of claim 256 wherein the cell lysate is not subjected to denaturing conditions.

258. (New) The method of claim 256 wherein the cell lysate is subjected to heat denaturing conditions.

259. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, wherein the cell lysate is not purified, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

260. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

261. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the genome, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

262. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the genome, wherein the cell lysate is subjected to heat denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

263. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, wherein the cell lysate comprises a whole genome, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, and

incubating the cell lysate under conditions that promote replication of the genome, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

264. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate, bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

265. (New) The method of claim 264 wherein the cell lysate is not subjected to denaturing conditions.

266. (New) The method of claim 264 wherein the cell lysate is subjected to heat denaturing conditions.

267. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, wherein the cell lysate is not purified, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

268. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, and

incubating the cell lysate under conditions that promote replication of the genome,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

269. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the genome, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the genome by strand displacement replication of another replicated strand.

270. (New) A method of amplifying a whole genome, the method comprising, lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate,  
wherein the cell lysate comprises a whole genome, and

incubating the cell lysate under conditions that promote replication of the  
genome, wherein the cell lysate is subjected to heat denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during  
replication at least one of the replicated strands is displaced from the genome by strand  
displacement replication of another replicated strand.

271. (New) A method of amplifying a whole genome, the method comprising,  
lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate,  
wherein the cell lysate comprises a whole genome, wherein nucleic acids in the cell  
lysate are not separated from other material in the cell lysate, and

incubating the cell lysate under conditions that promote replication of the  
genome, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the genome results in replicated strands, wherein during  
replication at least one of the replicated strands is displaced from the genome by strand  
displacement replication of another replicated strand.

272. (New) A method of amplifying a target nucleic acid sequence, the method  
comprising,

lysing cells to form a cell lysate, and

incubating the cell lysate in the presence of a set of primers and DNA  
polymerase and under conditions that promote replication of a target sequence,

wherein replication of the cell lysate results in replicated strands, wherein during  
replication at least one of the replicated strands is displaced from the target sequence  
by strand displacement replication of another replicated strand.

273. (New) The method of claim 272 wherein the cell lysate is not subjected to  
denaturing conditions.

274. (New) The method of claim 272 wherein the cell lysate is subjected to heat  
denaturing conditions.

275. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate, and

incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the cell lysate is not purified,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

276. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate, and

incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

277. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate, and

incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

278. (New) A method of amplifying a target nucleic acid sequence, the method comprising,  
lysing cells to form a cell lysate, and  
incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein the cell lysate is subjected to heat denaturing conditions,  
wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

279. (New) A method of amplifying a target nucleic acid sequence, the method comprising,  
lysing cells to form a cell lysate, and  
incubating the cell lysate in the presence of a set of primers and DNA polymerase and under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, wherein the cell lysate is not subjected to denaturing conditions,  
wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

280. (New) A method of amplifying a target nucleic acid sequence, the method comprising,  
lysing cells to form a cell lysate,  
bringing into contact a set of primers, DNA polymerase, and the cell lysate, and  
incubating the cell lysate under conditions that promote replication of a target sequence,  
wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.



281. (New) The method of claim 280 wherein the cell lysate is not subjected to denaturing conditions.

282. (New) The method of claim 280 wherein the cell lysate is subjected to heat denaturing conditions.

283. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
bringing into contact a set of primers, DNA polymerase, and the cell lysate, and  
incubating the cell lysate under conditions that promote replication of a target sequence, wherein the cell lysate is not purified,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

284. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
bringing into contact a set of primers, DNA polymerase, and the cell lysate, and  
incubating the cell lysate under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

285. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,  
bringing into contact a set of primers, DNA polymerase, and the cell lysate, and  
incubating the cell lysate under conditions that promote replication of a target sequence, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

286. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, and incubating the cell lysate under conditions that promote replication of a target sequence, wherein the cell lysate is subjected to heat denaturing conditions,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

287. (New) A method of amplifying a target nucleic acid sequence, the method comprising,

lysing cells to form a cell lysate,

bringing into contact a set of primers, DNA polymerase, and the cell lysate, and incubating the cell lysate under conditions that promote replication of a target sequence, wherein nucleic acids in the cell lysate are not separated from other material in the cell lysate, wherein the cell lysate is not subjected to denaturing conditions,

wherein replication of the cell lysate results in replicated strands, wherein during replication at least one of the replicated strands is displaced from the target sequence by strand displacement replication of another replicated strand.

288. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for lysis,  
a solution for neutralization,  
a set of primers, and  
a DNA polymerase.

289. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for cell lysis,

a solution for neutralization of a cell lysate,  
a set of primers, and  
a DNA polymerase.

290. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for lysing cells,  
a solution for neutralizing lysed cells,  
a set of primers, and  
a DNA polymerase.

291. (New) A kit for amplifying a whole genome, the kit comprising  
a composition for lysis,  
a composition for neutralization,  
a set of primers, and  
a DNA polymerase.

292. (New) A kit for amplifying a whole genome, the kit comprising  
a composition for cell lysis,  
a composition for neutralization of a cell lysate,  
a set of primers, and  
a DNA polymerase.

293. (New) A kit for amplifying a whole genome, the kit comprising  
a composition for lysing cells,  
a composition for neutralizing lysed cells,  
a set of primers, and  
a DNA polymerase.

294. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for lysis, wherein the solution for lysis is alkaline,  
a solution for neutralization,

a set of primers, wherein the primers are 6 nucleotides long, wherein the primers  
each contain at least one modified nucleotide such that the primers are nuclease  
resistant, and

a DNA polymerase, wherein the DNA polymerase is  $\phi$ 29 DNA polymerase.

295. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for cell lysis, wherein the solution for cell lysis is alkaline,  
a solution for neutralization of a cell lysate,  
a set of primers, wherein the primers are 6 nucleotides long, wherein the primers  
each contain at least one modified nucleotide such that the primers are nuclease  
resistant, and

a DNA polymerase, wherein the DNA polymerase is  $\phi$ 29 DNA polymerase.

296. (New) A kit for amplifying a whole genome, the kit comprising  
a solution for lysing cells, wherein the solution for lysing cells is alkaline,  
a solution for neutralizing lysed cells,  
a set of primers, wherein the primers are 6 nucleotides long, wherein the primers  
each contain at least one modified nucleotide such that the primers are nuclease  
resistant, and

a DNA polymerase, wherein the DNA polymerase is  $\phi$ 29 DNA polymerase.

### Remarks

Claims 1-223 are pending. Claims 224-296 are newly added. New claims 224-287 find support at least on page 8, line 1; page 74, lines 26-31; and page 75, line 4; where the direct use of lysed cells is described. Also, claims 224-287 recite a method of amplifying a sample without purification. These claims find support at least on page 7, lines 25-27 and 31; page 8, lines 4-7; page 43, lines 3-6; and page 74, lines 14-16. New claims 224-239 and 256-271 are directed to a method of amplifying a whole genome. These claims find support at least in claim 1 and throughout the specification where methods of amplifying a whole genome is described. New claims 240-255 and 272-287 are directed to amplification of nucleic acid sequences and find support at least

in claim 137 and throughout the specification where methods of amplifying a target nucleic acid sequence are described.

Claims 224-255 recite a method of amplification wherein the cell lysate is neutralized. These claims at least find support on page 74, lines 28 and 29 and page 75, line 5; where neutralization of lysed cells is described.

Claims 226, 230, 234, 238, 242, 246, 250, 254, 258, 262, 266, 270, 274, 278, 282, and 286 are directed to methods of amplification wherein heat is used to denature the target sample. Support for these claims may be found at least on page 39, lines 8-10, 24-27 and page 40, lines 3 and 4. New claims 224, 225, 227-229, 231-233, 235-237, 239-241, 243-245, 247-249, 251-253, 255-257, 259-261, 263-265, 267-269, 271-273, 275-277, 279-281, 283-285, and 287 recite methods wherein the target sample is not subjected to denaturing conditions and find support at least on pages 3, line 12-17; page 39, lines 6-19, 24-28; page 40, line 3; page 43, line 4; and page 75, line 1.

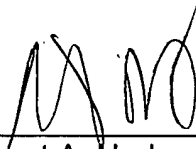
Claims 287-296 find support at least on page 9, lines 24-28 and page 38, lines 9 and 10; where kits are described; and throughout the specification, where compositions for use in the disclosed method (which can be combined in kits) are described.

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73 A credit card payment form PTO-2038 in the amount of \$3,051.00, representing \$657.00 for the fee for a small entity under 37 C.F.R. § 1.16(c) and \$2,394.00 for the fee for a small entity under 37 C.F.R. § 1.16(b) is enclosed. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

  
\_\_\_\_\_  
Robert A. Hodges  
Reg. No. 41,074

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Date: March 29, 2002

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